1901MNRAS..61..186.

of marking the time which elapsed between the openings was repeated many times." In a footnote is described the "simple and neat" contrivance for registering the positions of spots which was simply a reticule of small squares now known as the *réseau*. Papers which followed were on Meteors and on the Zodiacal Light, which Mr. Lowe observed assiduously. He wrote several very interesting papers on meteors and fireballs in *Recreative Science* and other publications. He observed the eclipse of 1860 at Fuente del Mar, near Santander, making a very complete series of meteorological observations which showed the temperatures at various heights above the ground, amount of cloud, amount of light, &c., during the eclipse (*R.A.S. Memoirs*, vol. xli.). And his activities extended to other branches of science. In the R.S. Catalogue of scientific papers is a list of 46 papers by him (up to 1883) on a great variety of subjects. He invented the dry powder tests for ozone in the atmosphere; he was an ardent naturalist, publishing works on conchology, on British ferns, grasses, and plants. His experiments on the hybridisation of ferns produced some remarkable results, which, however, were not generally accepted as genuine.

He was one of the founders and original Fellows of the Meteorological Society, a Fellow of the Royal, the Geological, the Linnæan, and other learned Societies. He married in 1849 Miss Annie Allcock. His death occurred on the 10th of March 1900, at his residence, Shirenewton Hall, Monmouthshire.

John McLandsborough was the eldest son of Andrew McLandsborough, of Kells, in Scotland, who had settled at Otley, in Yorkshire, where his son was born on the 3rd of May 1820. Young McLandsborough was educated in Otley, principally in the grammar school of that town. He was apprenticed to a currier and leather merchant, but after completing his indentures, finding the occupation uncongenial, he obtained employment on the Ordnance Survey, and soon became an expert surveyor. Desiring to be a civil engineer, he spent several years with the late Mr. John Miller, a civil engineer, in Edinburgh, and returning to Yorkshire he commenced practice in Bradford in 1850. His experience in Scotland had been chiefly in connection with the laying out and construction of railways, and he did similar work in his general practice at Bradford. Besides work for other companies, he was instrumental in inducing the Midland Railway to extend their line to Otley and Ilkley, and he was engineer for the line between Keighley and Oxenhope. He was also greatly interested in sanitary engineering, and carried out various waterworks undertakings at Shipley, Horsforth, and Clitheroe, besides drainage works at Burley, Yeadon, and many other places.

When quite a young man Mr. McLandsborough started a Mutual Improvement Society, afterwards merged in a Mechanics' Institute, of which he became a member of the committee of

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1901MNRAS..61..186.

management. He was always much interested in the institutions of Bradford, and at his death left a fine collection of British minerals and fossils, which he had formed, to the Cartwright Memorial Hall, and about 250 volumes of scientific books to the Central Free Library.

In 1868 he established a meteorological station at Bradford, and commenced a series of daily observations, which are still carried on by Mr. H. A. Johnson, now Mr. McLandsborough's successor in business. He was one of the original members of the Yorkshire Naturalists' Union, and one of the oldest members of the Yorkshire Geological and Polytechnic Society. He was greatly interested in astronomy, and had for many years a good reflecting telescope, by Browning, mounted at his residence at Manningham, near Bradford.

He married Miss Robinson, of Knaresborough, who, with two daughters, survives him. He retired from business in 1882, and continued to reside at Manningham till his death on the 24th of February 1900, in his eightieth year. He was elected a Fellow of the Society on the 14th of March 1873.

Horace Pearce was the youngest son of Mr. Francis Pearce, of Hadley Lodge, Shropshire, and was born on the 21st November 1838. He was for a long period private secretary to the late William Orme Foster, Esq., of Apley Park, Bridgnorth. A man of quiet, retiring habits, he took a great interest in science, being a Fellow of the Geological Society and the Linnæan Society, a member of the Swiss Alpine Club, the Birmingham Naturalist Society, and the Worcestershire Naturalists' Field Club, of the last of which he was president for some years. He was also on the general Committee of the British Association. He had not been in good health for some time, and left England for the South of France in the end of 1899, without, however, deriving much benefit from the change of climate. After a serious illness of about a week, he died, on the 19th February, 1900, at his residence, The Limes, Stourbridge.

He was elected a Fellow of this Society on the 14th of January 1887.

William T. Radford was born at Exeter on the 21st of November 1810. The elder son of Mr. Peter Radford, a physician connected with the Devon and Exeter Hospital, and his wife, formerly a Miss Mackintosh. He was sent to Dr. Carpenter's school at Bristol, and had among his school-fellows James Heywood, Philip Worsley and T. B. Potter. Later he went to Dublin, boarding in the house of James Martineau and studying at Trinity College, where he took the degrees of M.B. and M.D. He walked the hospitals but never practised as a doctor. In 1839 he and his mother (his father having died when he was a child) came to reside with his younger brother at Sidmount, Sidmouth, which continued to be his home until he died on the

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